

WM2015 Conference Panel Report

PANEL SESSION 129: US DOE D&D 2015 and Beyond

Session Co-Chairs: **Graham Jonsson**, *UK NDA*
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Panel Reporter: **Robert Vellinger**, *TerranearPMC, LLC*

Panelists:

- **Andy Szilagyi**, *D&D Program Leader, US DOE*
- **Bill Murphie**, *US DOE PPPO Lexington Office*
- **Mike Swartz**, *Vice-President, Plutonium Finishing Plant Closure Project CHPRC*

This panel was conceived during the 2014 Waste Management Symposium planning sessions. The panel was intended to bring together top scientific and technical experts to focus on current D&D projects at major DOE sites. The panel was composed of representatives from DOE and a key industry contractor responsible for a broad range of D&D challenges. During the session, panelists and audience members provided perspectives and considerations related to complex D&D activities currently underway as well as those being planned in the near future. A summary of the panel discussion of D&D efforts, challenges, and opportunities for future efforts is presented below.

Summary of Presentations:

The panel was comprised of the three speakers identified above. Each presenter spoke from PowerPoint slides (copies attached). The first speaker, **Andrew Szilagyi**, provided a status and progress summary from the EM Deactivation and Decommissioning Program. He discussed that the D&D program is the second largest component of the EM program behind the Tank Waste program with over 2,800 facilities yet to be addressed. Significant accomplishments have been made and were largely from the Idaho Materials Fuel Complex work, Oak Ridge K-25, 27 and 31 demolition along with C-410 demolition to slab at Paducah and GDP deactivation work at Portsmouth. Richland removed the 309 Plutonium Recycle Test Reactor and completed the 801 RTS Facility demolition and backfill and 326 facility demolition. Richland also performed D&D on the 342 complex, 3730 facility and 352F substation. Finally, West Valley completed the Main Plant Process and Vitrification Cell Deactivation.

A summary slide presented the remaining facilities planned for D&D by facility in the current EM baseline with a total number of facilities exceeding 2,800. Future D&D liabilities were discussed along with a process underway to add additional refinement for defining the actual scope of D&D activities within specific projects. The IG/GAO report recommendations were reviewed as well as the action steps being taken to incorporate the recommendations identified.

Next, **Mike Swartz** discussed the Safe and Compliant Demolition of the Hanford Plutonium Finishing Plant (PFP). The mission for this project is the safe and compliant demolition of the PFP to slab-on-grade by September 20, 2016. After reviewing the history of the facility, several photos showed the demolition progress that has been made in recent years; specifically the glove box hazards removed and pencil tank units sealed out to date, and ancillary buildings that have been demolished/removed from the complex.

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Matching adequate controls with appropriate levels of risk is something that has been done successfully on this project. Mike equated it to making the complicated “simple.” This includes how regulatory compliance was maintained and the demolition path forward for 243Z in the spring of 2015 and 234-5Z, 242-Z, 236-Z, and 291-Z in the spring of 2016.

Our final panel presenter was **William Murphie**, discussing Portsmouth and Paducah Gaseous Diffusion Plant Sites DOE Cleanup and D&D missions. Seven facilities are targeted for demolition in the 2015-2016 time frames. One of the key issues for this project is the waste disposal alternative to support long-term cleanup with community support. Currently site optimization studies are being performed. In closing, a summary slide of PPPO procurements was presented to clarify D&D plans for upcoming contracts available.

Synopsis of Panel Discussion

During the session, panelists and members of the audience provided perspectives and considerations related to D&D. The purpose of the panel was to foster communication of these perspectives and considerations. This section presents a synopsis of the discussion.

While there has been much done in the area of D&D, there remains a great deal left to do. The significant challenges of the past are precursors to the more difficult challenges facing the DOE complex not only from a technical point of view but also from a limited funded recognition. Finite resources are available to address remaining challenging sites. There is a significant opportunity to work collaboratively with DOE and its contractors to develop and implement effective D&D solutions within these two fundamental constraints.

Conclusions

D&D approaches for complex sites are beginning to receive more attention within the DOE community. This panel discussion provided a forum for exchanging concepts, challenges, and opportunities related to D&D. Past accomplishments as well as upcoming project challenges were discussed.